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EIA COLOR TELEVISION REPLACEMENT CYCLE STUDY

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Office of the Secretary



Results of a Study Conducted by
Market Facts, Inc.

Sponsored by
Electronic Industries Association
Consumer Electronics Group

April 1985

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APPENDIX

BACKGROUND AND OBJECTIVES

This report contains the results of a study of color TV ownership, replacement cycles, and certain factors which may affect the purchase rates of Color TV's. The objectives of the study were the following:

1. Describe current color TV ownership patterns.
2. Describe trends in purchasing color TV's.
3. Describe the replacement cycle of color TV's.
4. Examine the role of electronic peripherals in the purchase of color TV's.
5. Assess interest in new color TV products.

Directed by the Marketing Services Committee of the Video Division of the Consumer Electronics Group, a division of the Electronic Industries Association, this study was conducted by the Washington D.C. office of Market Facts, Inc., an independent marketing research company.

STUDY METHODS

A self-administered mail questionnaire was used to collect the data. Information was requested on all color TV's acquired by each household since 1970. Two versions were employed which differed only in question 21-23. Copies of the questionnaires are contained in the Appendix.

Market Facts' Consumer Mail Panel was used as the sample frame for the study. The sample draw consisted of 17,000 households which was balanced against national demographics using the following factors:

- region of the country
- population density
- income
- age
- household size.

A total of 12,581 usable returns were processed -- a 74 percent rate. Of these households, 11,742 owned color TV's and 839 did not. Households owning color TV's reported a total of 19,731 color TV's acquired since 1970. The survey was conducted between January 10 and February 10, 1985, just following the Christmas buying season.

A complete set of tabulations was prepared and provided to EIA. Findings in this report are selected from those tabulations. Some tables describe the characteristics and behavior of color TV owning households. Other tables are based upon new color TV's acquired between 1970 and 1984. The base for percentages is noted in each table.

HIGHLIGHTS OF THE FINDINGS

- In 1984, about 10 percent of color TV's were sold to first-time buyers. This proportion has been declining steadily during the past 15 years.
- The demographics of non-color TV households are relatively unpromising, i.e. relatively small households with low incomes.
- Nearly one-half (46%) of color TV households have more than one color TV. Twelve percent have three or more color TV's.
- Portable models represented 74 percent of color TV's sold in 1984 compared to 48 percent in 1970. In 1984, monitors represented 2 percent and projection TV's 1 percent of color TV's purchased by American households.
- The purchase price of color TV's has remained remarkably stable over the past 15 years.
- Remote control is becoming a common feature of color TV's. In 1984, 58 percent of all consoles sold and 37 percent of all portable models were equipped with remote control.
- Screen sizes of 21-27 inches dominate console color TV sales. Primarily, portable TV sales are for sets with 19-20 inch screens, although 13-14 inch portables are becoming increasingly more popular.
- In 1984 about 40 percent of color TV's were purchased as replacements for sets that went out of use; 38 percent were purchased as additional TV's, and about 10 percent were upgrades of current TV's. The proportions of additional and upgrade purchases have been increasing over the past 15 years.
- Ten years after purchase, 75-80 percent of color TV's are still working and in use. It takes about 15 years for half of all sets to go out of use.
- Households owning electronic peripherals such as VCR's, home computers, video games, or cable TV are much more likely to own two or more color TV's.

- Households purchasing an electronic peripheral are substantially more likely than color TV households overall to purchase a new color TV in the same year. Furthermore, purchase of a peripheral also increases the likelihood of a color TV purchase in the immediately succeeding year -- particularly if the peripheral was a VCR.
- One percent of color TV households reported owning a projection TV and one percent indicated that they were very likely to purchase one in the next 12 months.
- Digital television, priced \$50 higher than current TV's, was seen as a likely purchase (somewhat or very) by 49 percent of color TV households. Stereo television, priced \$100 higher than current TV's, was considered a likely purchase by 30 percent of color TV households. Even with these price premiums, the survey indicated there was considerable interest in both digital and stereo television.

SECTION I

**Current Ownership of Color TV Sets
and Purchase Intention**

Table I.1
 DEMOGRAPHIC PROFILE OF COLOR TV HOUSEHOLDS
 AND NON-OWNERS

	<u>Non-Owners</u> <u>%</u>	<u>Single</u> <u>Color TV</u> <u>%</u>	<u>Multiple</u> <u>Color TV's</u> <u>%</u>	<u>All U.S</u> <u>Households</u> <u>%</u>
<u>Household Size</u>				
One	40	28	14	23
Two	29	32	34	32
Three	13	16	20	18
Four	11	14	18	16
Five or more	8	10	13	12
<u>Income</u>				
Less than \$10,000	46	26	12	24
\$10,00 - \$14,999	20	17	11	14
\$15,000 - \$24,999	18	27	23	24
\$25,000 - \$39,999	11	21	29	23
\$40,000 and above	5	10	25	16
<u>Age</u>				
Under 30	34	21	12	21
30 - 39	18	22	25	22
40 - 49	7	13	20	16
50 - 59	10	14	20	15
60+	31	30	23	26
Base: Households	(841)	(5871)	(5604)	

Table I.2
OWNERSHIP AND PURCHASE HISTORY

<u>Number of Color TV Sets</u>	<u>Sets In Use</u>	<u>Sets Acquired During Past 15 Years</u>
	<u>%</u>	<u>%</u>
One	55	32
Two	33	37
Three	9	20
Four	2	7
Five or more	1	5
Base: Color TV Households	(11059)	(11742)

Table I.3

LOCATIONS IN HOUSE OF
COLOR TV SETS

<u>Room</u>	<u>Total</u> <u>%</u>	<u>Consoles</u> <u>%</u>	<u>Portables</u> <u>%</u>
Living Room	48	63	41
Family Room/Playroom	21	26	18
Bedroom	20	4	28
Kitchen	4	1	5
Study/Den/Library	5	5	6
Other	2	1	2
Base: Color TV Sets	(14545)*	(4630)	(9500)

*The console and portable base is slightly less than the total base because of monitors, projection TV's, and no answers.

Table I.4

DEMOGRAPHIC PROFILE OF HOUSEHOLDS LIKELY TO BUY A
NEW COLOR TV IN THE NEXT 12 MONTHS

	<u>All Color TV Households</u> %	<u>Not Likely</u> %	<u>Somewhat Likely</u> %	<u>Very Lightly</u> %	<u>All U.S. Households</u> %
<u>Household Size</u>					
One	21	22	21	19	23
Two	33	34	31	33	32
Three	18	18	18	17	18
Four	16	16	17	16	16
Five or more	12	11	13	15	12
<u>Income</u>					
Less than \$10,000	19	20	18	18	24
\$10,000 - \$14,999	14	14	14	15	14
\$15,000 - \$24,999	25	25	24	25	24
\$25,000 - \$39,999	25	25	25	25	23
\$40,000 and above	17	17	19	18	16
<u>Age</u>					
Under 30	17	16	19	21	21
30 - 39	23	23	25	28	22
40 - 49	16	16	18	17	16
50 - 59	17	17	16	15	15
60+	26	28	23	19	26
Base: Color TV Households	(11670)	(8352)	(2264)	(1054)	

SECTION II

**Trends in the Purchase of Color
TV Sets: 1970-1984**

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Table II.1
TYPE OF COLOR TV SETS PURCHASED
1970-1984

	<u>Year of Purchase</u>														
	<u>1970</u> <u>%</u>	<u>71</u> <u>%</u>	<u>72</u> <u>%</u>	<u>73</u> <u>%</u>	<u>74</u> <u>%</u>	<u>75</u> <u>%</u>	<u>76</u> <u>%</u>	<u>77</u> <u>%</u>	<u>78</u> <u>%</u>	<u>79</u> <u>%</u>	<u>1980</u> <u>%</u>	<u>81</u> <u>%</u>	<u>82</u> <u>%</u>	<u>83</u> <u>%</u>	<u>84</u> <u>%</u>
<u>Type of Set</u>															
Console	52	49	45	39	42	37	35	33	31	32	30	26	24	24	22
Portable	48	51	55	62	58	62	65	68	69	68	69	74	75	74	74
Base: Color TV Sets	(1230)	(660)	(888)	(753)	(882)	(1152)	(984)	(838)	(1320)	(1343)	(1640)	(1147)	(1654)	(1874)	(2423)

Table II.2
COST OF COLOR TV SETS
1970-1984

<u>Cost</u>	<u>Year of Purchase</u>														
	<u>1970</u> <u>%</u>	<u>71</u> <u>%</u>	<u>72</u> <u>%</u>	<u>73</u> <u>%</u>	<u>74</u> <u>%</u>	<u>75</u> <u>%</u>	<u>76</u> <u>%</u>	<u>77</u> <u>%</u>	<u>78</u> <u>%</u>	<u>79</u> <u>%</u>	<u>1980</u> <u>%</u>	<u>81</u> <u>%</u>	<u>82</u> <u>%</u>	<u>83</u> <u>%</u>	<u>84</u> <u>%</u>
Less than \$300	20	19	22	21	20	19	21	20	20	20	19	21	21	23	29
\$300-\$499	41	44	43	44	41	44	46	46	45	41	47	45	44	45	40
\$500-\$699	24	22	24	22	25	23	21	17	22	24	21	19	20	18	17
\$700 + more	15	16	12	14	14	14	13	17	14	15	13	15	15	15	14
Mean	\$465	\$457	\$444	\$438	\$459	\$457	\$468	\$469	\$469	\$478	\$476	\$473	\$475	\$458	\$444

Base: Color TV Sets (1059) (578) (793) (673) (785) (985) (873) (728)(1177)(1164)(1439)(1012)(1499)(1678)(2204)

Table II.3
COST OF CONSOLE COLOR TV SETS
1970-1984

	<u>Year of Purchase</u>														
	<u>1970</u> <u>%</u>	<u>71</u> <u>%</u>	<u>72</u> <u>%</u>	<u>73</u> <u>%</u>	<u>74</u> <u>%</u>	<u>75</u> <u>%</u>	<u>76</u> <u>%</u>	<u>77</u> <u>%</u>	<u>78</u> <u>%</u>	<u>79</u> <u>%</u>	<u>1980</u> <u>%</u>	<u>81</u> <u>%</u>	<u>82</u> <u>%</u>	<u>83</u> <u>%</u>	<u>84</u> <u>%</u>
<u>Cost</u>															
Less than \$300	20	15	18	19	17	19	18	23	15	16	16	12	10	8	4
\$300-\$499	40	43	35	35	32	34	35	30	27	27	26	19	18	16	18
\$500-\$699	23	24	33	28	33	28	27	22	32	33	32	31	36	37	37
\$700 + more	18	18	14	19	18	19	20	25	26	25	27	38	36	39	40
Mean	\$554	\$574	\$547	\$559	\$577	\$568	\$640	\$637	\$638	\$637	\$656	\$708	\$726	\$682	\$669
Base: Color TV Sets	(558)	(272)	(356)	(259)	(327)	(368)	(302)	(242)	(377)	(380)	(439)	(257)	(371)	(403)	(498)

Table II.4
COST OF PORTABLE COLOR TV SETS
1970-1984

<u>Cost</u>	<u>Year of Purchase</u>														
	<u>1970</u> <u>%</u>	<u>71</u> <u>%</u>	<u>72</u> <u>%</u>	<u>73</u> <u>%</u>	<u>74</u> <u>%</u>	<u>75</u> <u>%</u>	<u>76</u> <u>%</u>	<u>77</u> <u>%</u>	<u>78</u> <u>%</u>	<u>79</u> <u>%</u>	<u>1980</u> <u>%</u>	<u>81</u> <u>%</u>	<u>82</u> <u>%</u>	<u>83</u> <u>%</u>	<u>84</u> <u>%</u>
Less than \$300	19	21	25	22	23	18	23	19	22	21	20	24	25	28	38
\$300-\$499	43	45	48	50	47	51	52	54	54	49	56	55	53	56	48
\$500-\$699	26	20	17	18	19	20	17	14	16	20	16	14	15	11	10
\$700 + more	12	15	10	11	12	10	9	13	8	10	8	7	8	6	4
Mean	\$356	\$345	\$344	\$356	\$369	\$386	\$372	\$386	\$376	\$390	\$393	\$382	\$377	\$367	\$349
Base: Color TV Sets	(481)	(294)	(414)	(404)	(448)	(599)	(551)	(479)	(779)	(765)	(977)	(737)	(1099)	(1225)	(1597)

Table II.5

SCREEN SIZE OF COLOR TV SETS
1970-1984

<u>Screen Size</u>	<u>Year of Purchase</u>														
	<u>1970</u> <u>%</u>	<u>71</u> <u>%</u>	<u>72</u> <u>%</u>	<u>73</u> <u>%</u>	<u>74</u> <u>%</u>	<u>75</u> <u>%</u>	<u>76</u> <u>%</u>	<u>77</u> <u>%</u>	<u>78</u> <u>%</u>	<u>79</u> <u>%</u>	<u>1980</u> <u>%</u>	<u>81</u> <u>%</u>	<u>82</u> <u>%</u>	<u>83</u> <u>%</u>	<u>84</u> <u>%</u>
12 inches or under	3	4	3	4	4	4	4	4	4	4	5	4	6	5	7
13-14 inches	6	5	5	6	5	6	7	7	7	9	9	11	12	13	17
15-18 inches	10	8	12	12	10	11	10	9	10	7	8	8	8	7	6
19-20 inches	38	40	40	43	43	44	46	47	47	47	46	47	47	47	43
21 inches and over	43	43	39	36	38	36	32	34	32	33	32	30	28	27	28
Base: Color TV Sets	(1223)	(659)	(893)	(757)	(874)	(1156)	(993)	(836)	(1333)	(1347)	(1646)	(1151)	(1662)	(1897)	(2445)

Table II.6
SCREEN SIZE OF CONSOLE COLOR TV SETS
1970-1984

<u>Screen Size</u>	<u>Year of Purchase</u>														
	<u>1970</u> <u>%</u>	<u>71</u> <u>%</u>	<u>72</u> <u>%</u>	<u>73</u> <u>%</u>	<u>74</u> <u>%</u>	<u>75</u> <u>%</u>	<u>76</u> <u>%</u>	<u>77</u> <u>%</u>	<u>78</u> <u>%</u>	<u>79</u> <u>%</u>	<u>1980</u> <u>%</u>	<u>81</u> <u>%</u>	<u>82</u> <u>%</u>	<u>83</u> <u>%</u>	<u>84</u> <u>%</u>
15-18 inches	4	1	4	3	4	4	2	2	2	2	2	2	1	2	2
19-20 inches	24	21	18	16	18	17	18	12	16	17	15	13	12	15	10
21 inches and over	72	78	78	81	77	78	80	86	81	80	83	86	86	84	87
Base: Color TV Sets	(620)	(314)	(393)	(285)	(364)	(418)	(337)	(269)	(408)	(427)	(493)	(288)	(398)	(453)	(536)

Table II.7
SCREEN SIZE OF PORTABLE COLOR TV SETS
1970-1984

<u>Screen Size</u>	<u>Year of Purchase</u>														
	<u>1970</u> <u>%</u>	<u>71</u> <u>%</u>	<u>72</u> <u>%</u>	<u>73</u> <u>%</u>	<u>74</u> <u>%</u>	<u>75</u> <u>%</u>	<u>76</u> <u>%</u>	<u>77</u> <u>%</u>	<u>78</u> <u>%</u>	<u>79</u> <u>%</u>	<u>1980</u> <u>%</u>	<u>81</u> <u>%</u>	<u>82</u> <u>%</u>	<u>83</u> <u>%</u>	<u>84</u> <u>%</u>
12 inches or under	7	7	6	6	6	5	6	6	6	6	6	6	7	7	9
13-14 inches	11	10	9	9	8	9	11	10	9	13	13	14	15	18	22
15-18 inches	16	14	19	17	15	16	14	12	14	10	11	11	11	9	7
19-20 inches	54	59	58	59	61	60	61	64	61	61	60	59	59	58	53
21 inches and over	13	10	9	8	10	10	7	8	10	10	10	11	8	8	8
Base: Color TV Sets	(582)	(335)	(481)	(461)	(504)	(709)	(637)	(558)	(896)	(900)	(1124)	(838)	(1222)	(1383)	(1786)

Table II.8

COLOR TV SETS EQUIPPED WITH REMOTE CONTROL
1970-1984

	<u>Year of Purchase</u>														
	<u>1970</u> <u>%</u>	<u>71</u> <u>%</u>	<u>72</u> <u>%</u>	<u>73</u> <u>%</u>	<u>74</u> <u>%</u>	<u>75</u> <u>%</u>	<u>76</u> <u>%</u>	<u>77</u> <u>%</u>	<u>78</u> <u>%</u>	<u>79</u> <u>%</u>	<u>1980</u> <u>%</u>	<u>81</u> <u>%</u>	<u>82</u> <u>%</u>	<u>83</u> <u>%</u>	<u>84</u> <u>%</u>
With Remote Control	7	7	6	7	8	10	12	14	16	17	23	28	30	39	43
Without Remote Control	93	93	94	93	92	91	88	86	84	83	77	72	70	62	57

Base: Color TV Sets (1228) (661) (889) (749) (880) (1162) (987) (842) (1326) (1354) (1649) (1161) (1671) (1898) (2451)

Table II.9
 CONSOLE COLOR TV SETS EQUIPPED
 WITH REMOTE CONTROL
 1970-1984

	<u>Year of Purchase</u>														
	<u>1970</u> <u>%</u>	<u>71</u> <u>%</u>	<u>72</u> <u>%</u>	<u>73</u> <u>%</u>	<u>74</u> <u>%</u>	<u>75</u> <u>%</u>	<u>76</u> <u>%</u>	<u>77</u> <u>%</u>	<u>78</u> <u>%</u>	<u>79</u> <u>%</u>	<u>1980</u> <u>%</u>	<u>81</u> <u>%</u>	<u>82</u> <u>%</u>	<u>83</u> <u>%</u>	<u>84</u> <u>%</u>
With Remote Control	8	10	5	10	10	11	11	16	18	25	31	41	44	55	58
Without Remote Control	92	91	95	90	90	89	89	84	82	75	69	59	57	45	42
Base: Color TV Sets	(629)	(316)	(391)	(281)	(366)	(423)	(335)	(270)	(407)	(429)	(493)	(290)	(402)	(454)	(539)

Table II.10
PORTABLE COLOR TV SETS EQUIPPED
WITH REMOTE CONTROL
1970-1984

	<u>Year of Purchase</u>														
	<u>1970</u> <u>%</u>	<u>71</u> <u>%</u>	<u>72</u> <u>%</u>	<u>73</u> <u>%</u>	<u>74</u> <u>%</u>	<u>75</u> <u>%</u>	<u>76</u> <u>%</u>	<u>77</u> <u>%</u>	<u>78</u> <u>%</u>	<u>79</u> <u>%</u>	<u>1980</u> <u>%</u>	<u>81</u> <u>%</u>	<u>82</u> <u>%</u>	<u>83</u> <u>%</u>	<u>84</u> <u>%</u>
With Remote Control	6	5	6	6	7	8	13	13	15	14	19	23	25	32	37
Without Remote Control	94	95	94	95	93	92	88	87	85	86	81	77	75	68	63
Base: Color TV Sets	(576)	(336)	(478)	(457)	(508)	(713)	(634)	(561)	(890)	(903)	(1125)	(845)	(1225)	(1385)	(1786)

SECTION III

Replacement Cycle for Color TV Sets

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